

"Science Serving the Coast": Overview of Marine Extension and Georgia Sea Grant

Brooke Purves



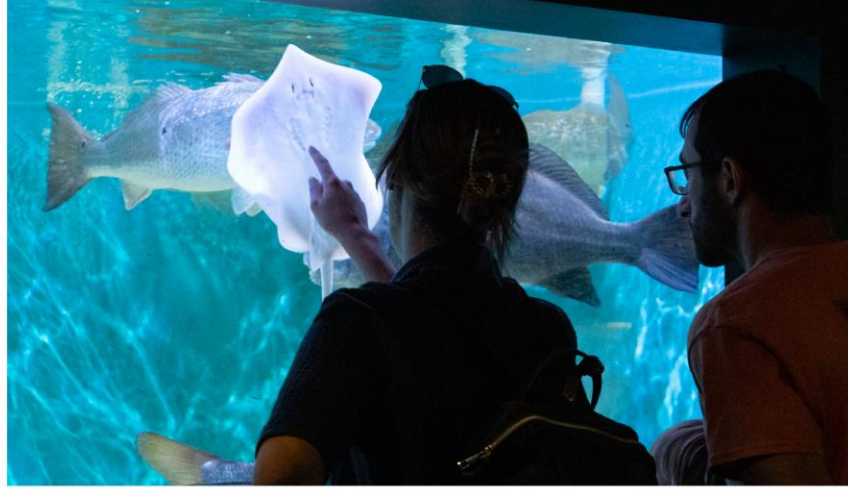
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About me

- A third-year **Ocean Sciences** major and **Ecology** minor at UGA
- Double Dawgs Program
- Intern at Marine Extension and Georgia Sea Grant
 - Public programs and outreach
- Ocean Initiative Club
- Redcoat Marching Band
- Studying abroad in May





MISSION

To improve the environmental, social and economic health of the Georgia coast through **research, education and extension.**



OUR LOCATIONS



ATHENS

- Headquarters' office
- Research coordination and fiscal management
- Coastal resilience



UGA MARINE EDUCATION CENTER AND AQUARIUM

- K-12 education
- Summer Marine Science Camps
- Marine Education Fellowships



SHELLFISH RESEARCH LAB

- Aquaculture research and extension
- Oyster hatchery
- Shellfish restoration research



BRUNSWICK

- Sustainable land use and fisheries extension
- Coastal ecology research
- Marine debris outreach



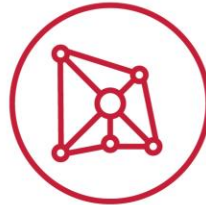
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FOCUS AREAS



Environmental literacy
and workforce development



Resilient coastal communities
and economies



Healthy coastal ecosystems



Sustainable fisheries
and aquaculture



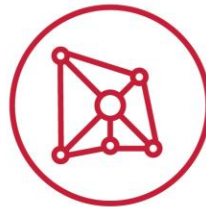
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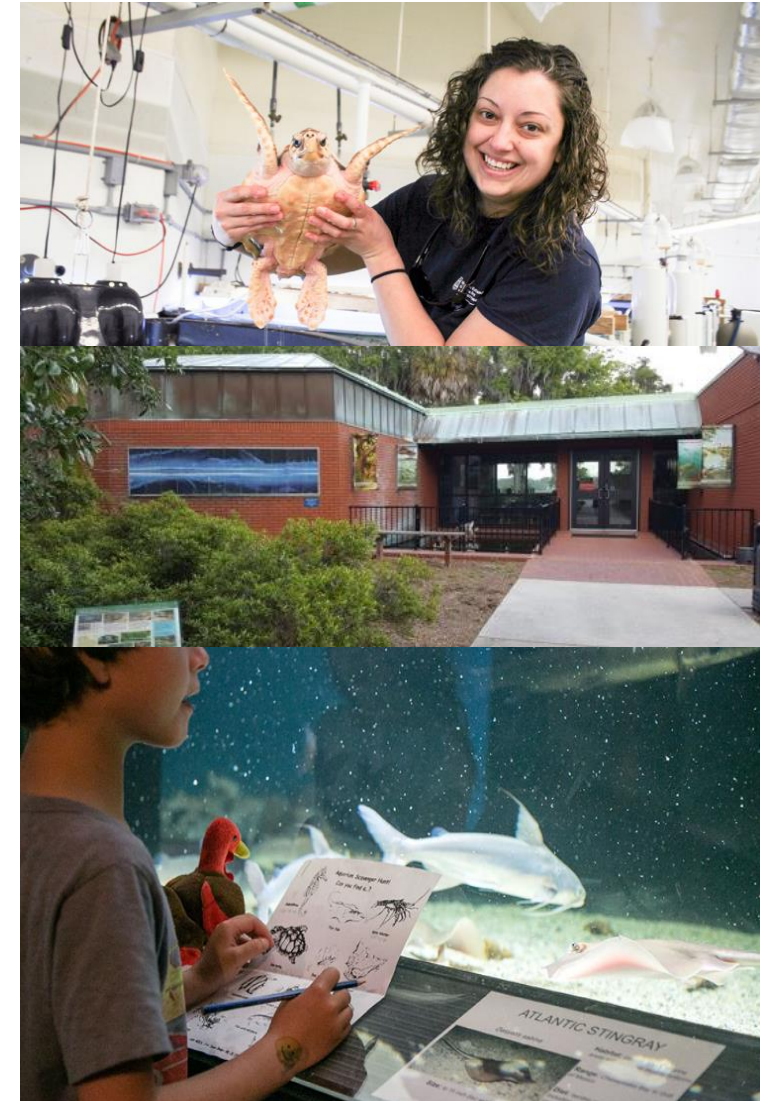


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Environmental Literacy: UGA Marine Education Center and Aquarium

- Home to Georgia's first saltwater aquarium, it features 16 exhibit tanks that showcase a variety of Georgia's marine life.
- Most species are caught by aquarium staff right off the coast. A public touch tank allows visitors to get up close and personal with some of Georgia's marine invertebrates such as whelks and crabs.
- The Marine Education Center and Aquarium offers activities and programs designed to provide a fun way for families and visitors to get involved in marine science, while also enjoying a day at the aquarium.



Environmental Literacy: UGA Marine Education Center and Aquarium

Grades PK-4

Three educational programs

- Sea Star
- Dive Down Deep

Grades 5-12, college

23 educational programs

- Aquarium
- Art
- Laboratory
- Field



Environmental Literacy: Curriculum Development

- Educators develop hands-on engaging lesson plans that cover important coastal issues, including weather and climate that shape coastal communities
 - *Water Shapes Our Planet and Our Lives* provides a unique, hands-on experience that allows students to explore local weather, discover and create tools used by scientists to collect weather data, and evaluate long-term trends recorded by climate scientists.

Water Shapes Our Planet and Our Lives Science Curriculum



Environmental Literacy: Public Programs

- Recently hired a new **public programs coordinator** in 2022
- Launched a suit of programs for families, including finding meaning on the marsh series, behind the scenes tours, and school's out programs on diverse topics.



School's Out! → VISIT THE **UGA AQUARIUM** ON SKIDAWAY ISLAND

Calling all kids, parents and curious adults! While local schools are out, the UGA Aquarium is offering a variety of programs featuring our ambassador education animals and hands-on activities.

To register, visit: gacoast.uga.edu/events

	COASTAL REPTILES FEB. 20 10 - 11 A.M. \$10
	SQUID DISSECTION MARCH 20 10 - 11 A.M. \$10
	BARRIER ISLAND EXPLORATION APRIL 4 9 A.M. - 3 P.M. \$56
	DOLPHIN STUDY APRIL 7 9 A.M. - NOON \$28



Environmental Literacy: Volunteer Opportunities

➤ Marine Extension and Georgia Sea Grant's service to the community is greatly enhanced by the work of our volunteers.

- **Marine Education Center and Aquarium Volunteer**
- Trails and Grounds Maintenance
- **Phytoplankton Monitoring Network**
- Bird Nest Box Monitoring
- EcoScapes Volunteer
- Oyster Restoration Projects



Workforce Development

- Provide on-the-job training and experience in ocean, coastal and marine science disciplines

STATE FELLOWSHIPS

Marine Education Fellowship

Application window: *February - March*

Designed for recent college graduates who would like experience in marine science education, coastal ecology research and aquarium husbandry.

State Fellowship

Application window: *April - July*

Matches graduate students with local, state, and federal agencies to better understand the policy management of coastal and marine resources.

Legal Fellowship

Application window: *Year-round*

Offers students currently enrolled in a law program the chance to work with lawyers and policymakers in coastal communities.

Research Traineeship

Application window: *February - March*

For undergraduate or graduate students seeking support and mentorship through their research endeavors.

INTERNSHIPS

Focus areas:

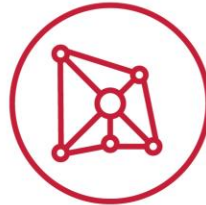
- Communications
- Aquarium Science
- Shellfish Research
- Stormwater Research
- Summer Camp
- Coastal Resilience
- Sustainable Landscapes
- Microplastics and Marine Debris
- Water Quality Research
- Pre-k - 4 Education
- Boat Operations
- Public Programs
- Phytoplankton Monitoring
- and more!



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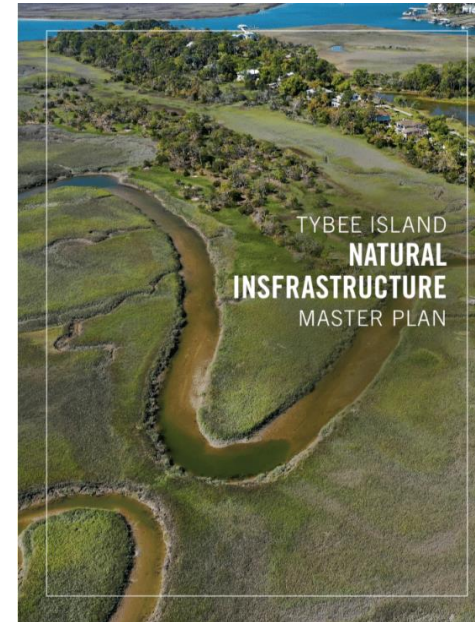


Resilient Coastal Communities and Economies

- **Tybee Natural Infrastructure Plan (2023)**
 - Building resilience on Tybee Island through collaborative research and community engagement
- **Coastal Awareness & Responsible Ecotourism (2021- 2023)**

Certification program developed in collaboration with Manomet.

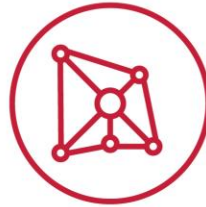
 - Ensures **ecotour guides** educate their customers about coastal resources and how to protect them.
 - Provides ecotour companies with tools to implement **best practices** when it comes to water-based tourism activities.



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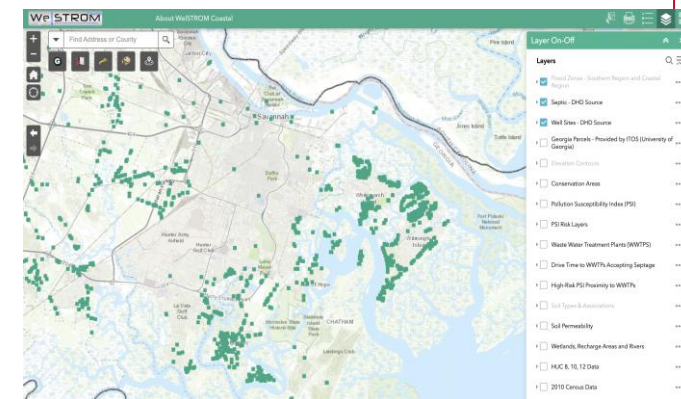


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Healthy and Coastal Ecosystems

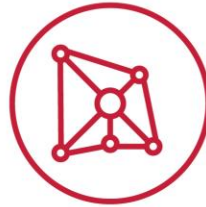
- **Coastal Georgia Rain Garden Program (2020)**
Designed to improve stormwater management and protect Georgia's water resources
- **Failing Septic Tanks (2019)**
Mapped every septic system in an 11-county region to help officials recognize and address septic system failures before a serious public health crisis can occur. Helps communities better plan when they need to install new septic tanks to accommodate growth.



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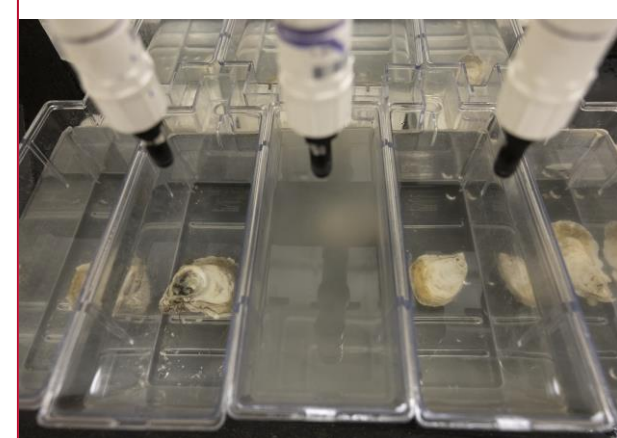
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Sustainable Fisheries and Aquaculture: Hatchery

UGA Oyster Hatchery:

- Launched in 2015 to revive the state's oyster industry
- Cultivating single oysters to be sold on the half-shell
- Providing aquaculture training to shellfish farmers so they can meet growing consumer demand



Sustainable Fisheries and Aquaculture: Restoration



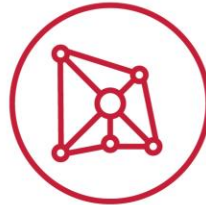
- Spat-on-shell oyster deployment could result in faster-growing oyster reefs
- Project involves volunteer engagement and support through shell bagging events
- Results from the study will be used to inform future oyster restoration efforts and shoreline stabilization methods



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BECOME A FRIEND

Join our **Friends** group and support our efforts to increase public awareness and understanding of coastal ecosystems and provide educational experiences that instill curiosity and wonder in adults and children alike.

gacoast.uga.edu/give/



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